C/O CURT CARLSON 601 S. GRANT ST. DENVER, CO. 80209
(303) 733-4391

MHTSUG meetings are usually the 4th Saturday of the month. NEXT MEETING Saturday July 27, 1991 2 PM at the address listed above.

MHTSUG maintains a sub-board on THE KINGS MARKET BBS. (303)665-6091, 8-1-N, accessible through PC-Pursuit. MENU SELECTIONS TO GET TO THE SUB-BOARD ARE:
(1) CONTENTS
(2) INTERESTS & USERS GROUPS
(3) TIMEX-SINCLAIR
General messages for club members are addressed to "ALL".

FROM NITE TIME NEWS Sept/Oct,88

A replacement IC for the 8049 in the QL is available from Vernon Smith more details are advertised in QL World. Upgrading with this new IC will prevent the "rollover effect", double letters that result when adjacent keys are pressed.

Zebra Systems Greeting Card Designer program can use Pixel Print icons by resaving icons with ".G" as an extension.

TAPE UNLOCKER (TS1000)
By Tim L, Ward (Reprinted from KATS Komputer Knews)

First ENTER this POKE routine.

```
10 REM 012345678
20 FOR X=16514 TO 16522
30 INPUT A
40 POKE X,A
50 NEXT X
<<RUN AND ENTER>>
```

Now enter the following data at the prompts.
62,0,50,0,64,1,55,0,201
Line 10 should read as follows when listed.

```
10 REM Y M RND R TAN
```

Now Enter program lines 20 to 110 as follows;

```
20 REM TAPE LOCKER
      PUBLIC DOMAIN LIBRARY OF TIM L. WARD
30 SCROLL
40 PRINT "INPUT PROGRAM NAME"
50 INPUT N$
60 POKE 16520, CODE N$(LEN N$)
70 LOAD N$( TO LEN N$-1)+CHR$ USR 16514
80 REM
      NO MORE WORRY ABOUT TAPES THAT WON'T LET YOU MAKE COPIES
      OR LISTINGS
90 STOP
100 SAVE "UNLOCK"
110 LIST
```

ZX-TERM*80 MODIFICATION FOR USE WITH MichTron BBS PROGRAM
by Fred Nachbaur
Downloaded from Nicholson Nitetime Network

NNN does not recognize Delete (ASCII 7Fh = 127d) when DEL is sent. To delete last character sent you must use BS (Backspace = ASCII 08h). Here are two ways to get a BS.

The easiest way is to send a CONTROL H (shift 3 then H). This works well if you are a reasonably good typist, and catch your mistakes shortly after making them.

To change the lookup table in ZX-TERM*80 to send a BS when DEL is used, first load either the original or your reconfigured version. Press BREAK when loaded. Then enter the following commands:

```
LET A$(9)=CHR$ 87
LET A$(344)=CHR$ 8
```

Save the modified program for future use.
Delete (shift 0) will now send a BS and continue to print a left-pointing arrow. You cand still send a DEL by using SYMBOL SHIFT B this will also display a left arrow.

THE 2068 VIDEO DIGITIZER
by Curt Carlson

A single board pluged into the 2068 expansion port can digitize and store any standard video image. Additionally the stored image can be changed in many ways, then saved to tape or disc, printed out on your printer or just viewed on the screen.

The original circuit drawing and design notes appeared in SYNC-LINC January/February 1987 and March/April 1987. The Toronto Timex-Sinclair Users Club came up with a digitizer circuit consisting of eleven intigrated circuits and one transistor. I sent for a board and the software included in January 1988. When I received the package in the mail just 6 days later I started a new project that is still on going. James G. Depuy of SMUG wrote a two page documentaion on building and aligning the circuit board. I easily obtained the electronic parts needed to assemble the board at a local parts supply in Denver. Three of the IC's are linear and the rest are low power schotky digital types.

The software when loaded and running has a menu that allows the user to adjust the board for initial video sync and threshold settings. A visible scan of the video input is observed on the TS2068 monitor. If a video camera is used, the lens iris and other adjustments of the video signal can be made to optimize the image as it is being scanned. Digitizing is made from one to as many as eight scans that are stored in memory. Each scan is set by the computer to capture a different gray scale of the image. When viewed after completing all scans a digitized image can be reversed, inverted vertically and horizontally. A section of

the screen can be cropped, moved and added to another screen by a cut and paste operation.

In order to get the eight scans to properly sample and merge progresively darker video image intensities I had to add an inverter IC with reversed stairstepped reference resistor array. As the software is written the gray scale starts out with the darkest image level and adds each lighter image. This is like cutting out a picture and painting it black and then trying to add detail with a black marker. The hardware modification was easier then trying to debug the program.

THE TOP PICTURE IS AN EIGHT GRAY SCALE printout using the original software. The bottom printout is a four gray scale redefind by John McMicheal's VIEOTEX. Both were printed on a TS2040 printer.

Last April John McMicheal, 1710 Palmer Dr., Laramie, WY 82070 offered a new program to drive the Digitizer called, VIDEOTEX, which corrected this gray scale problem and also reduced the number of gray levels displayed to four, but redefined the dot pattern to eliminate the "fabric" like texture evident in the original software.

Two other programs written by John are called, VIDEO 3-D and VIDEOCOPY. When these programs are used additional graphic functions are available, which will take a master video file and produce an image that will show "depth" to the image and add color. The color can be added by, VIDEOCOPY, which will colorize the gray scale image and print it to an OKIMATE 20 printer using an IBM parallel Plug 'n Print cart.

I will have more information and start a review of the Digitizer and the available software in the next newletter issue. -CTC-

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MAIL RECEIVED dated April 19, 1991 from Dr. Schail S. Bhatti of Blackburn England.

Dr. Bhatti, is a member of QUANTA, and has a desire to have QL users be part of a "mega-SuperQL" project. He has formed a group called QLAW, the QL Advancement Working group. "The aim of QLAW is simple", says Dr. Bhatti, "to create a SuperQL in a form that would appeal to a majority of current users, be relatively cheap, have hardware suitable for the 1990's, be expandable, run all current QL software, and avoid any copyright restrictions caused by Amstrad." To achieve these goals a pooling of skills and resources of each member, and voluntary subscription fees will be part of the project. Software and hardware will be marketed that will be designed, developed and completed from new and existing technology. Quanta and QL World will be publishing articles concerning QLAW, so look for these sources for more information, we will also include future updates in the MHTSUG newsletter. A questionnaire is also included for you to answer and return. The information will be confidential, and will give valuable information on interests and expertise of QL users. Dr. Bhatti emphasises that QDOS should be kept alive and well, and all the skills and expertise now gained by you, the QL user, should be allowed to sustain and grow by a well supported effort like QLAW.

MHTSUG has also received a letter from Robin Stevenson, an English freelance computer journalist, researching the state of the Sinclair QL and compatibles in the USA. The article will appear in the Sinclair QL World magazine. Mr. Stevenson has also prepared a questionnaire, but is interested in stories, anecdotes and other bits of useful information that you may like to submit. His address is:

R.J. Stevenson
552 Bradgate Road
Newtown Linford
Leicester. LEwill OHB
(0530) 242959

You may send your QL specific responses directly to Robin, or if they are received by MHTSUG, I will of course forward them on to England. Please do take the effort to respond with your input. I would like any input from you also, concerning any Microace, ZX80, ZX81, TS1000, PC8300, TS2068, QL and compatibles related information. It is just another way of letting everyone know you are still out there and alive and using your computer. -CTC-